UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,773	04/02/2002	John William Richardson	RCA 90195	2617

7590 04/02/2004

Joseph S Tripoli
Thomson Multimedia Licensing Inc
PO Box 5312
Princeton, NJ 08543-5312

EXAMINER	
TAYLOR, BARRY W	
ART UNIT	**PAPER NUMBER**
2643	4

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/089,773	RICHARDSON ET AL.	
	Examiner	Art Unit	
	Barry W Taylor	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Examiner is unable to determine from the Specification as to how one of ordinary skill in the art would make and use the invention. For example, independent claims 1, 10 and 19 generally recite system, method and apparatus for providing a telephony service in a digital subscriber loop environment. According to the general claim language, the system, method and apparatus contains device for converting analog signal into ATM-compatible format. Remote from the device is a modem that can receive digital signal from the device. Independent claims generally recite some sort of digitizer capable of receiving analog signal from telephone but it is unclear as to

where the signal digitizer is located? Is it at CPE or located within the remote modem or somewhere else? It is also unclear as to how the modes of operation are chosen or switched between.

Furthermore, the independent claims recite a telephone service is provided but the recited claim language falls short of this because the signal ends at either modem or digitizer. The Examiner is unable to determine what kind of service is provided when no service appears to be connected.

The Examiner is unable to find support in Applicant's specification for Applicant's general claim language. Furthermore, the specification is extremely difficult to read (see Specification rejection listed above).

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 recites the limitation "the digitizer" in line 22 but claim 5 depends upon claim 3 wherein "the modem" is recited. It appears claim 5 should depend upon "the digitizer" recited in claim 4. There is insufficient antecedent basis for this limitation in the claim.

Claims 7-8 recites the limitation "the digitizer" in line 31 but claim 7 depends upon claim 6 wherein "the modem" is recited. It appears claims 7-8 should depend upon "the digitizer" recited in claim 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan et al (6,141,339 hereinafter Kaplan) in view of Bog et al (6,229,803 hereinafter Bog). The following rejection is being made for what is best understood by the Examiner due to the 112 rejections listed above.

Regarding claims 1, 10 and 19. Kaplan teaches a system for providing a telephone service in a digital subscriber loop environment (see loop environment figure 2), comprising:

a customer interface unit for receiving an analog signal from a telephone and converting the analog signal into a digital signal in a first format, the first format being an ATM-compatible format (see figure 2 wherein interface 204 receives analog signals from telephony 210 and 212, next the analog signal is converted into ATM 206 figure 2);

a modem residing remotely from the customer interfacing unit (see modem 208 remotely located from interface unit 204 in figure 2) for receiving the digital signal in a first format (i.e. ATM format is shown in figure 2);

a signal digitizer (see 206 figure 2) to provide voice or data over ATM using modem 208 figure 2.

the system, in first mode of operation, coupling the digital signal in the first format (i.e. ATM as shown in figure 2) to the modem (208 figure 2).

Kaplan does not show second mode of operation.

Bog teaches using an interface between a telephony card and a session manager (abstract) wherein session manager continuously monitors messages listed on figure 2 (i.e. the objects 200 through 204) and when fault occurs the manager instructs telephony card to use conventional fail-to-POTS service for the channel that is malfunctioning (see column 7).

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the interface as taught by Kaplan to include software interface as taught by Bog for the benefit of using conventional Fail-To-POTS when channel malfunctioning as taught by Bog.

Regarding claims 2 and 11. Kaplan teaches wherein the telephone service is a POTS (col. 2 line 65 – col. 3 line 8).

Regarding claims 3, 5, 12 and 14. Kaplan teaches using modem 208 to provide voice or data over ATM.

Regarding claim 4. Kaplan teaches the analog signal (see analog telephones 210 and 212 figure 2) from telephone is coupled to the digitizer (see 206 figure 2) to provide voice or data over ATM using modem 208 figure 2.

Regarding claims 6-8 and 16-17. Kaplan teaches using interface 206 to provide first format (i.e. voice) or second format (i.e. data) over ATM.

Regarding claims 9, 18 and 20. Kaplan does not show second mode of operation is a power failure mode of operation.

Bog teaches using an interface between a telephony card and a session manager (abstract) wherein session manager continuously monitors messages listed on figure 2 (i.e. the objects 200 through 204) and when fault occurs the manager instructs telephony card to use conventional fail-to-POTS service for the channel that is malfunctioning (see column 7).

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the interface as taught by Kaplan to include software interface as taught by Bog for the benefit of using conventional Fail-To-POTS when channel malfunctioning as taught by Bog.

Regarding claim 13. Kaplan teaches using interface 206 to provide first coupling (i.e. voice) or second coupling (i.e. data) over ATM.

Regarding claim 15. Kaplan teaches modem 208 provides Ethernet connection to user terminals 214 and 216 figure 2.

5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan et al (6,141,339 hereinafter Kaplan) in view of Tate et al (6,400,803 hereinafter Tate). The following rejection is being made for what is best understood by the Examiner due to the 112 rejections listed above.

Regarding claims 1, 10 and 19. Kaplan teaches a system for providing a telephone service in a digital subscriber loop environment (see loop environment figure 2), comprising:

a customer interface unit for receiving an analog signal from a telephone and converting the analog signal into a digital signal in a first format, the first format being an ATM-compatible format (see figure 2 wherein interface 204 receives analog signals from telephony 210 and 212, next the analog signal is converted into ATM 206 figure 2);

a modem residing remotely from the customer interfacing unit (see modem 208 remotely located from interface unit 204 in figure 2) for receiving the digital signal in a first format (i.e. ATM format is shown in figure 2);

a signal digitizer (see 206 figure 2) to provide voice or data over ATM using modem 208 figure 2.

the system, in first mode of operation, coupling the digital signal in the first format (i.e. ATM as shown in figure 2) to the modem (208 figure 2).

Kaplan does not show second mode of operation.

Tate teaches using life line router (see figures 1-2 wherein "Lifeline" used to bypass modem for failover conditions and 320 figure 3) when failure detected in local port.

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the interface as taught by Kaplan to include Lifeline Analogue POTS as taught by Tate for the benefit of operating in Lifeline mode when voice over AAL malfunctioning (see Tate figure 1 wherein AAL failure occurring therefore use Lifeline Analogue POTS).

Regarding claims 2 and 11. Kaplan teaches wherein the telephone service is a POTS (col. 2 line 65 – col. 3 line 8).

Regarding claims 3, 5, 12 and 14. Kaplan teaches using modem 208 to provide voice or data over ATM.

Regarding claim 4. Kaplan teaches the analog signal (see analog telephones 210 and 212 figure 2) from telephone is coupled to the digitizer (see 206 figure 2) to provide voice or data over ATM using modem 208 figure 2.

Regarding claims 6-8 and 16-17. Kaplan teaches using interface 206 to provide first format (i.e. voice) or second format (i.e. data) over ATM.

Regarding claims 9, 18 and 20. Kaplan does not show second mode of operation is a power failure mode of operation.

Bog teaches using an interface between a telephony card and a session manager (abstract) wherein session manager continuously monitors messages listed on figure 2 (i.e. the objects 200 through 204) and when fault occurs the manager instructs telephony card to use conventional fail-to-POTS service for the channel that is malfunctioning (see column 7).

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the interface as taught by Kaplan to include software interface as taught by Bog for the benefit of using conventional Fail-To-POTS when channel malfunctioning as taught by Bog.

Regarding claim 13. Kaplan teaches using interface 206 to provide first coupling (i.e. voice) or second coupling (i.e. data) over ATM.

Regarding claim 15. Kaplan teaches modem 208 provides Ethernet connection to user terminals 214 and 216 figure 2.

6. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan et al (6,141,339 hereinafter Kaplan) in view of Gerszberg et al (6,359,881 hereinafter Gerszberg). The following rejection is being made for what is best understood by the Examiner due to the 112 rejections listed above.

Regarding claims 1, 10 and 19. Kaplan teaches a system for providing a telephone service in a digital subscriber loop environment (see loop environment figure 2), comprising:

a customer interface unit for receiving an analog signal from a telephone and converting the analog signal into a digital signal in a first format, the first format being an ATM-compatible format (see figure 2 wherein interface 204 receives analog signals from telephony 210 and 212, next the analog signal is converted into ATM 206 figure 2);

a modem residing remotely from the customer interfacing unit (see modem 208 remotely located from interface unit 204 in figure 2) for receiving the digital signal in a first format (i.e. ATM format is shown in figure 2);

a signal digitizer (see 206 figure 2) to provide voice or data over ATM using modem 208 figure 2.

the system, in first mode of operation, coupling the digital signal in the first format (i.e. ATM as shown in figure 2) to the modem (208 figure 2).

Kaplan does not show second mode of operation.

Gerszberg teaches loop network service architecture wherein a lifeline is provided for continuous telephony service in the event of a power failure at the CPE

(see 126 figure 2). The lifeline is utilized to connect interface device to the local telephone company's central office (col. 7 lines 19-60)

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the interface as taught by Kaplan to include lifeline connection as taught by Gerszberg for the benefit of operating in backup mode when CPE failure occurs.

Regarding claims 2 and 11. Kaplan teaches wherein the telephone service is a POTS (col. 2 line 65 – col. 3 line 8).

Regarding claims 3, 5, 12 and 14. Kaplan teaches using modem 208 to provide voice or data over ATM.

Regarding claim 4. Kaplan teaches the analog signal (see analog telephones 210 and 212 figure 2) from telephone is coupled to the digitizer (see 206 figure 2) to provide voice or data over ATM using modem 208 figure 2.

Regarding claims 6-8 and 16-17. Kaplan teaches using interface 206 to provide first format (i.e. voice) or second format (i.e. data) over ATM.

Regarding claims 9, 18 and 20. Kaplan does not show second mode of operation is a power failure mode of operation.

Bog teaches using an interface between a telephony card and a session manager (abstract) wherein session manager continuously monitors messages listed on figure 2 (i.e. the objects 200 through 204) and when fault occurs the manager instructs

telephony card to use conventional fail-to-POTS service for the channel that is malfunctioning (see column 7).

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the interface as taught by Kaplan to include software interface as taught by Bog for the benefit of using conventional Fail-To-POTS when channel malfunctioning as taught by Bog.

Regarding claim 13. Kaplan teaches using interface 206 to provide first coupling (i.e. voice) or second coupling (i.e. data) over ATM.

Regarding claim 15. Kaplan teaches modem 208 provides Ethernet connection to user terminals 214 and 216 figure 2.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor whose telephone number is (703) 305-4811. The examiner can normally be reached on Monday-Friday from 6:30am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (703) 305-4708. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 customer service Office whose telephone number is (703) 306-0377.

CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600